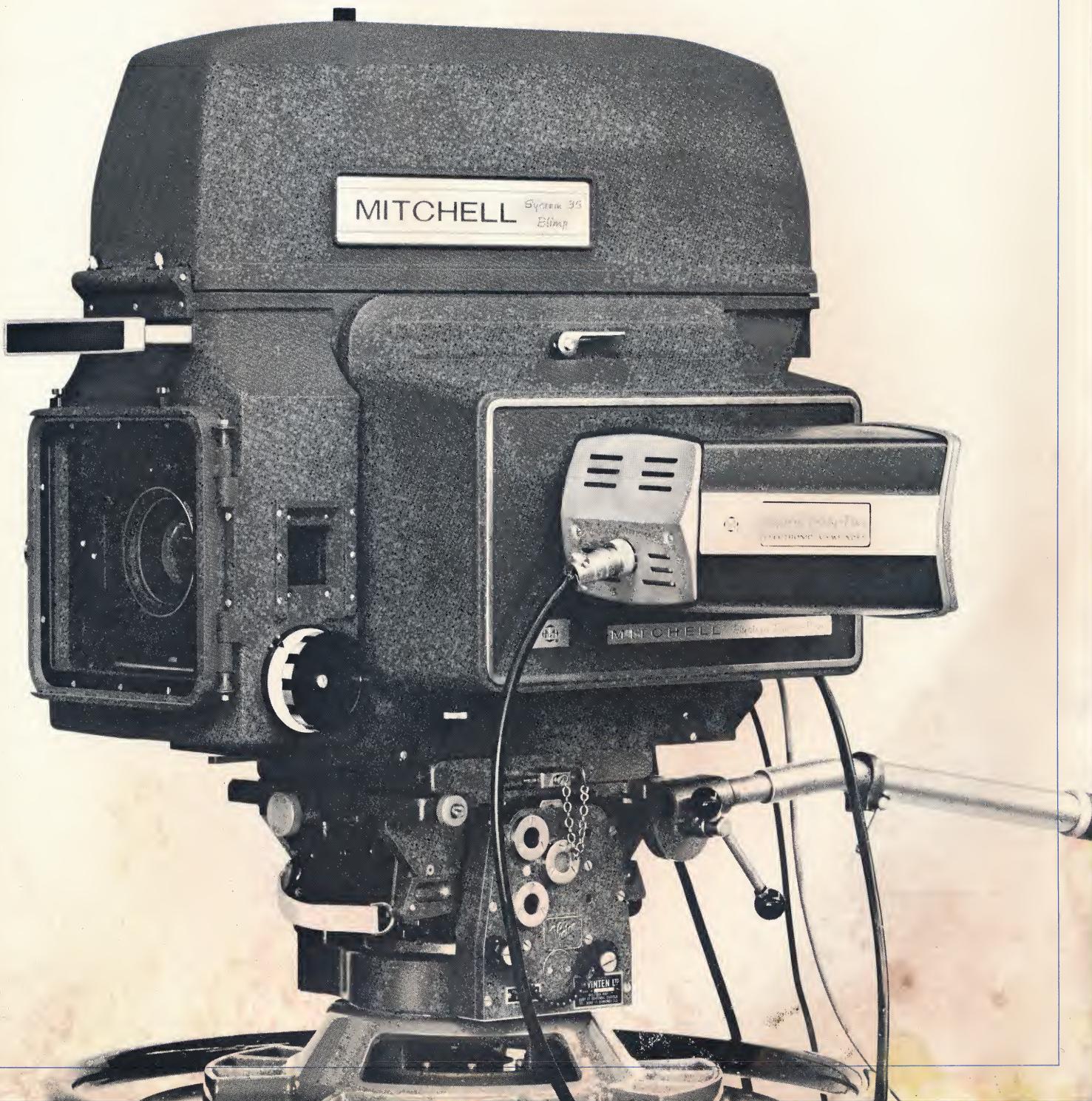
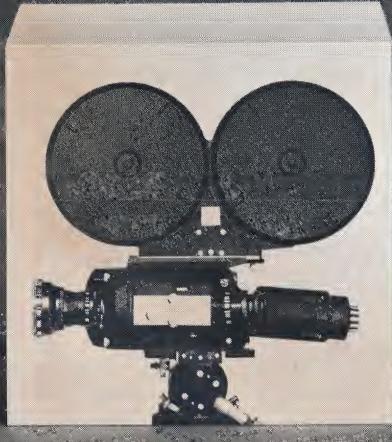


Mitchell System 35

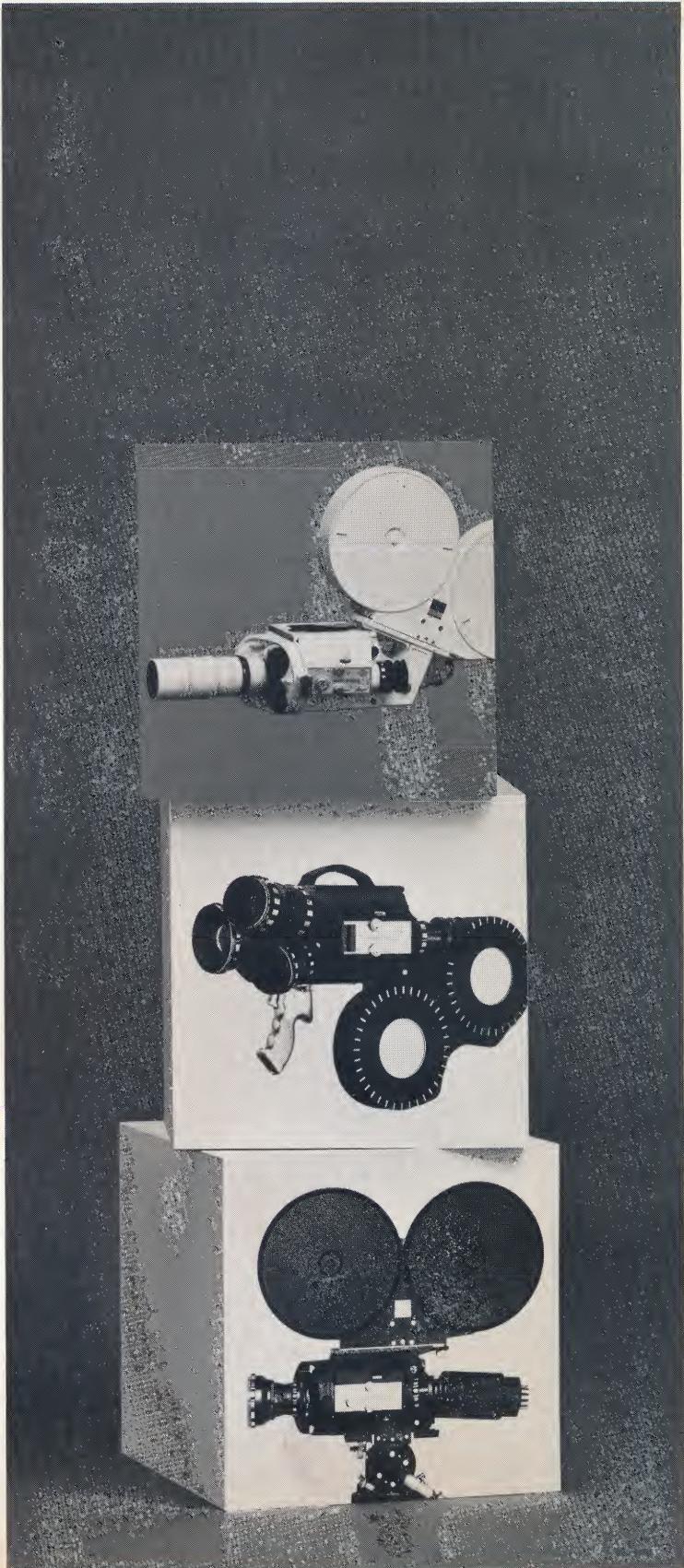
An unprecedented building-block camera system for the ultimate versatility in 35mm cinematography



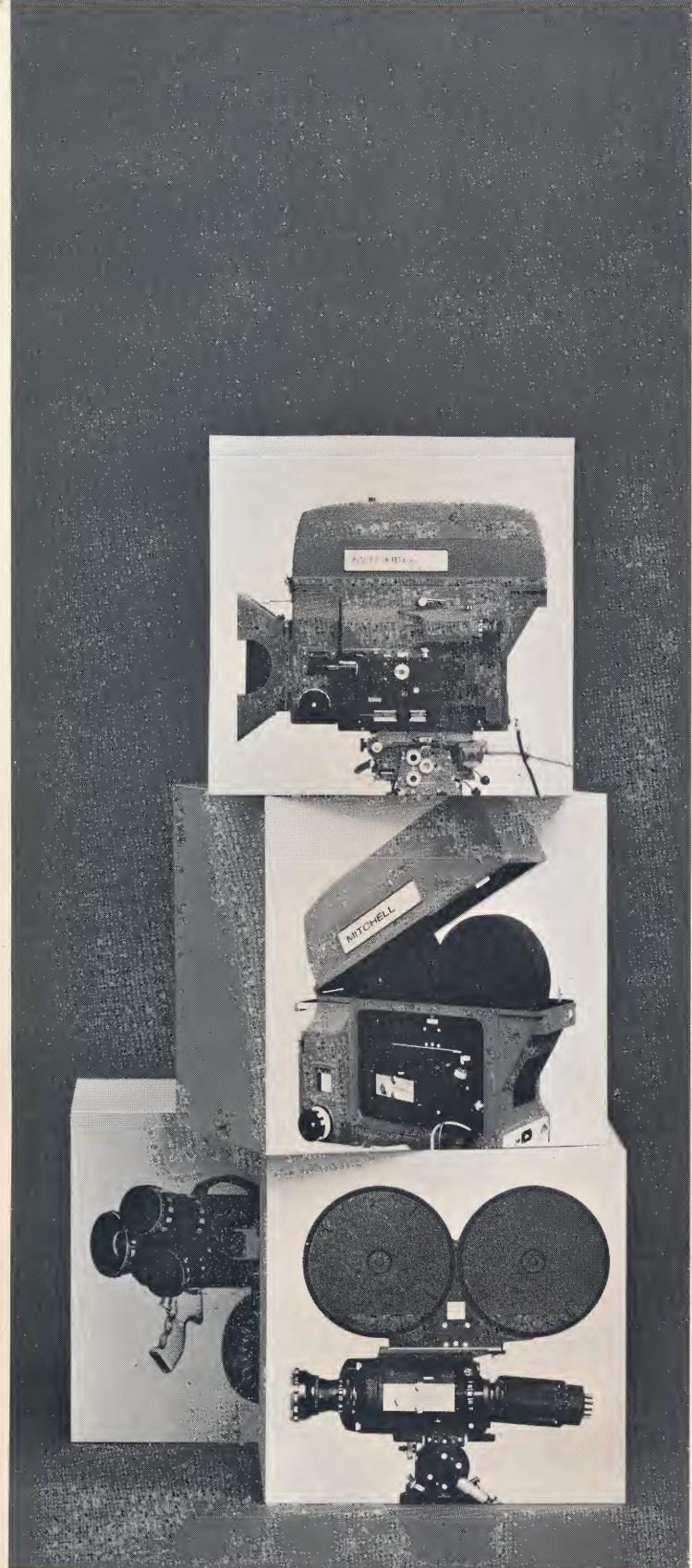
First, take a look at the System 35 Reflex, a highly refined cinecamera. With its many new, next-era features, this 35mm camera adapts rapidly to varied forms and functions. It is compact, lightweight, and the most reliable instrument in the world for all professional cinematographic uses.



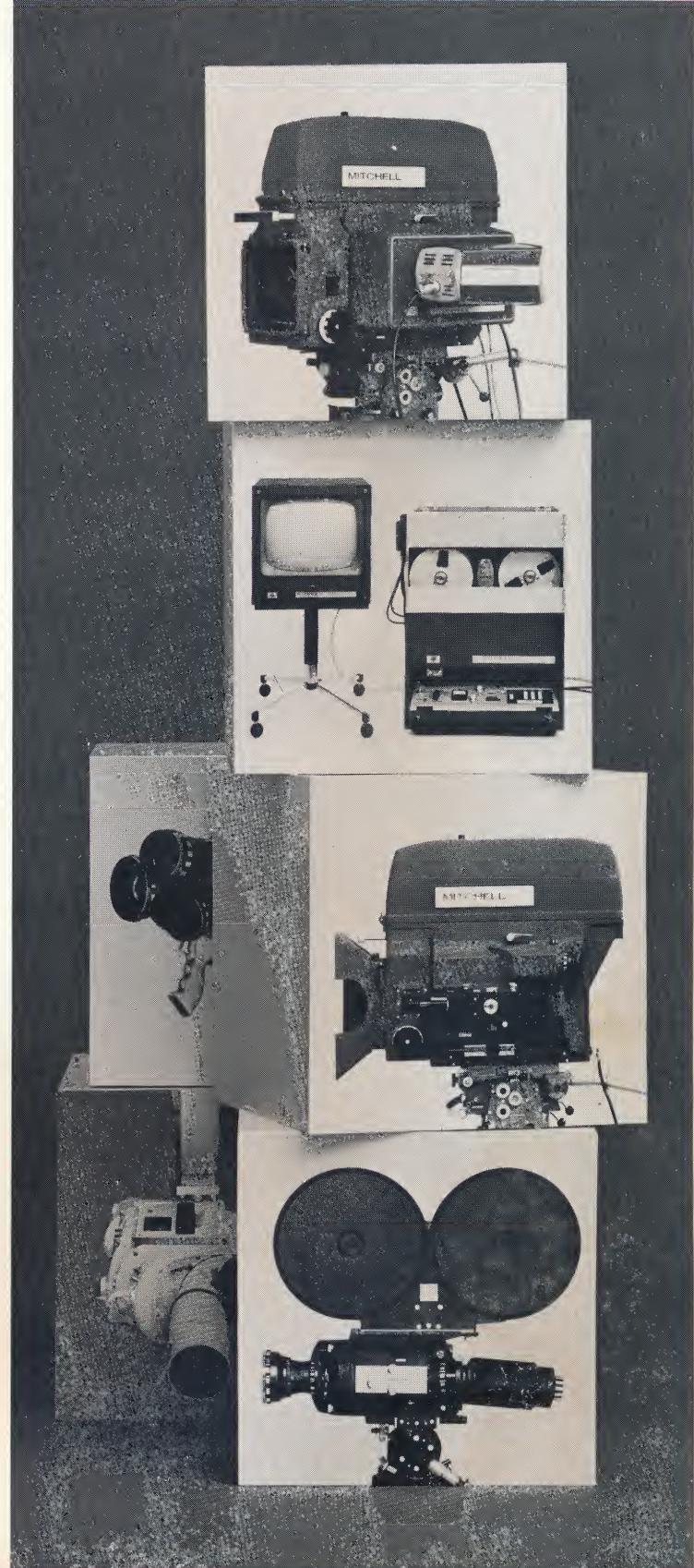
In mere minutes, convert the System 35 Reflex camera to an inverted-magazine configuration for portable and "close-quarters" shooting. And for special military and photo instrumentation projects, the basic camera can be fitted with a slant-mounted magazine and equipped for remote control and vidicon viewing.



Then, for unmatched sound-stage performance, install the camera in a System 35 sound blimp with reflex-viewing side door. This 'universal' blimp—compact, noiseless and efficient—is wired for international use, accommodating suitable camera motors for all local power supplies.

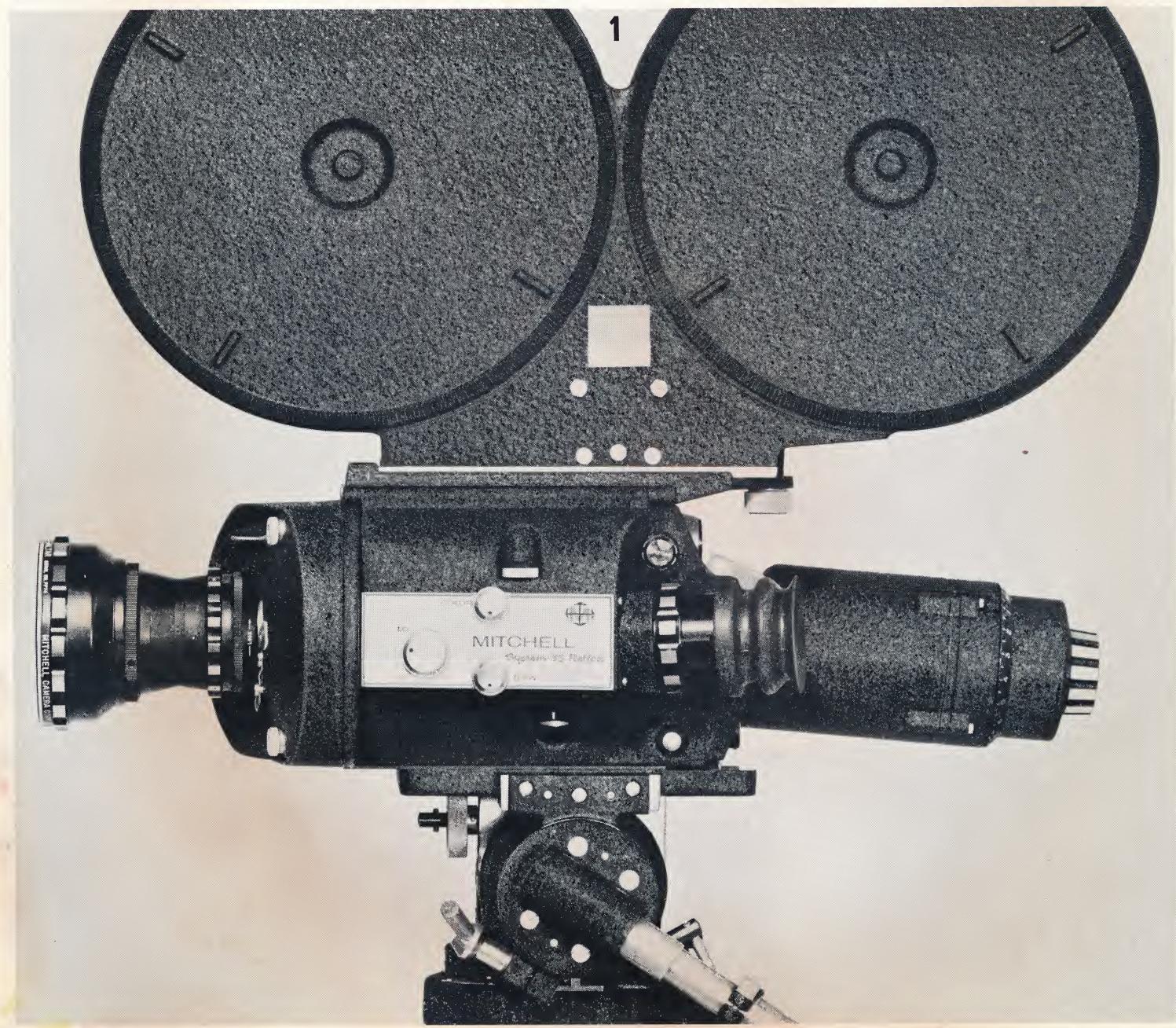


For the ultimate film-making capability, the full System 35 blends the best of two techniques: the flexibility of television—multiple-camera shooting, remote vidicon monitoring of actual camera images, video tape playback for immediate previewing—and final film of first-rate theatrical quality.



The new Mitchell System 35 Reflex has varied forms and faces, and embodies the finest of all world- famed Mitchell features

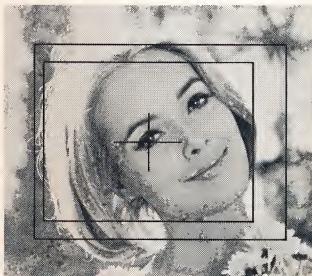
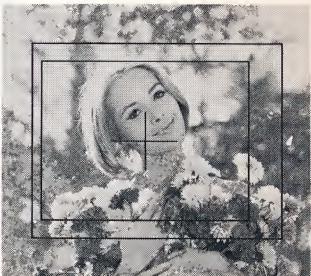
Variable shutter control
Magazine hold down knob
Optical viewing eyepiece
Footage indicator
Magazine adapter locking knob
Tachometer
Handle
Variable speed control knob



It was natural that Mitchell, world standard for more than 45 years, should develop the first major film-making innovation in over three decades: a building-block, modular camera system with a versatility never before available.

At its heart is the new Mitchell System 35 Reflex, the most sophisticated and advanced cinema camera ever designed (1). A greatly refined version of the famed Mitchell Mark II, the System 35 Reflex is the ideal camera for virtually any application — sound studio, location, documentary, research, military, and instrumentation filming. Among many new features: improved controls visibility (2), a top-mounted magazine with highly improved film pass; an added entry buckle trip for increased high-speed reliability; sound-deadening design that reduces noise by 10 db; and new optical coating processes that achieve even brighter reflex viewing than that typical of Mitchell Mark II quality.

A superlative reflex, through-the-lens viewing/focusing system is a major System 35 camera feature. The operator views a brilliant, larger-than-full-aperture field (3), clear and sharp to the ground glass edges even with the camera lens stopped down. Then there are: high- and low-power



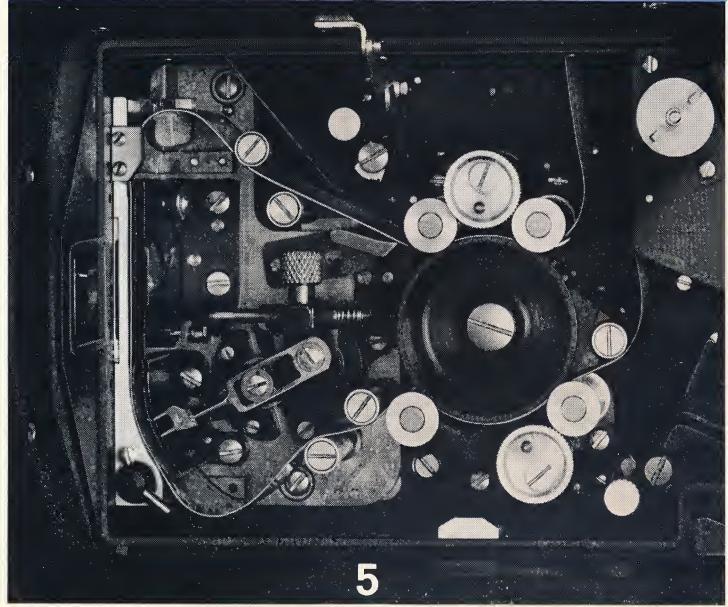
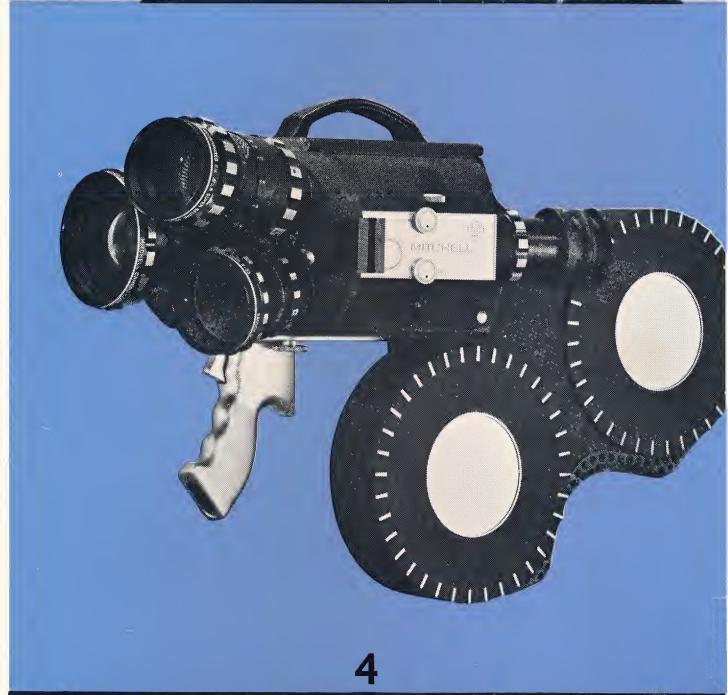
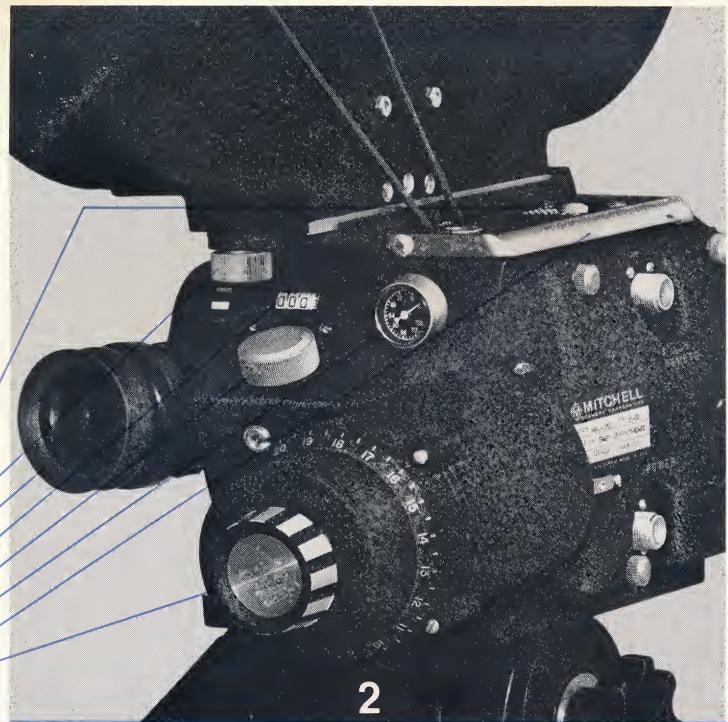
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magnification, color and monochrome contrast viewing filters; matte slot for use in special effects; non-fogging adjustable eyepiece; and interchangeable aspect-ratio ground glasses. Exceptionally bright viewing results from the use of a parallax-free, aluminized mirror rotating in synchronism with the adjustable disc-type, focal plane shutter. No light is diverted from the film with this reflex viewing system.

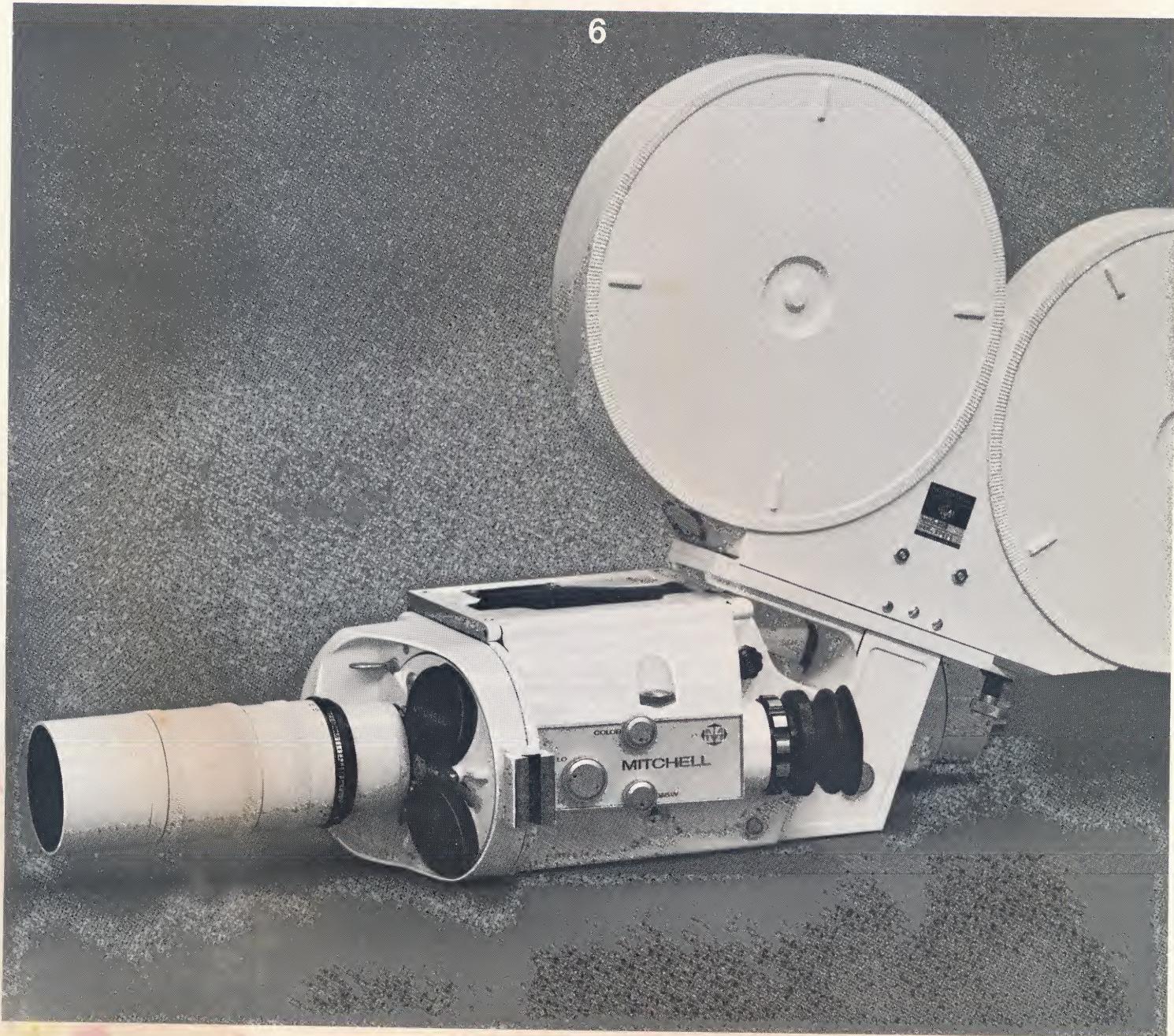
Flexibility is a primary characteristic of the unique System 35 camera. Just as it can be built up into an unusual camera complex, so can its elements be rapidly dismantled and used in other forms. Removal and installation of various motors is simple and fast, and the camera's built-in pulse generator makes it compatible (regardless of motor type) with all professional audio systems. The basic studio version takes all standard magazines (200 to 1,200 feet) and a complete line of bayonet-mount lenses and special accessories.

Speed of conversion is particularly notable. A full System 35 Reflex, for example, can be removed from its blimp, fitted with appropriate motor and an inverted 400-foot magazine (4), and be hand-carried for portable shooting in less than five minutes time.

Outstanding in the camera's mechanism is the advanced film transport (5), which gives precise, intermittent movement variable from stop-motion to 128 frames per second. Dual registration pins and double-dual pull-down claws hold film captive at all times, assuring a registration accuracy that exceeds film perforation tolerance. The aperture plate's filter slot accommodates two gelatin-filter holders. And the entire movement can be quickly removed, cleaned, and reinstalled without loss of timing.



**For exacting military, scientific
and other instrumentation
uses, the System 35 Reflex is
convertible for manual or
remote precision operation**



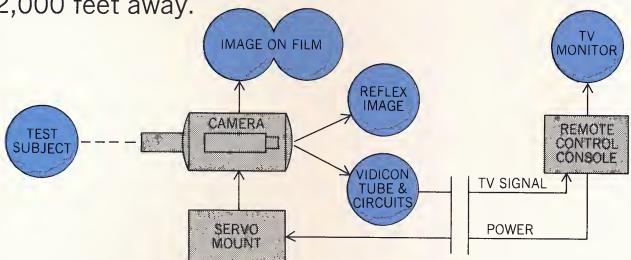
Long the standard camera for range photo-instrumentation, the Mitchell Mark II now offers even greater documentary and data-acquisition capabilities in its improved System 35 configuration. And at all frame rates from 12 to 128 fps, it has $\pm 2\%$ or better accuracy along with typical Mitchell theater quality, steadiness, and resolution.

Because much photo-instrumentation takes place in hazardous areas, or in other environments precluding an operator's presence, the basic System 35 Reflex is designed to permit (A) complete protection of camera and operator and (B) a unique, reliable method of remote viewing and controlling.

The camera is shown here fitted with a slant-load mounting and a 1,000-foot magazine (6). The slant mounting eliminates magazine overhang beyond the camera face, allowing protective housings to be positioned flush with the camera front. Other magazines and mountings can be substituted to bring the over-all maximum length to 18 $\frac{1}{4}$ inches or the over-all maximum height to 14 inches.

Like all other configurations of the System 35 camera, the instrumentation version can also be furnished with dual timing lights and an adjustable shutter correlation pulse.

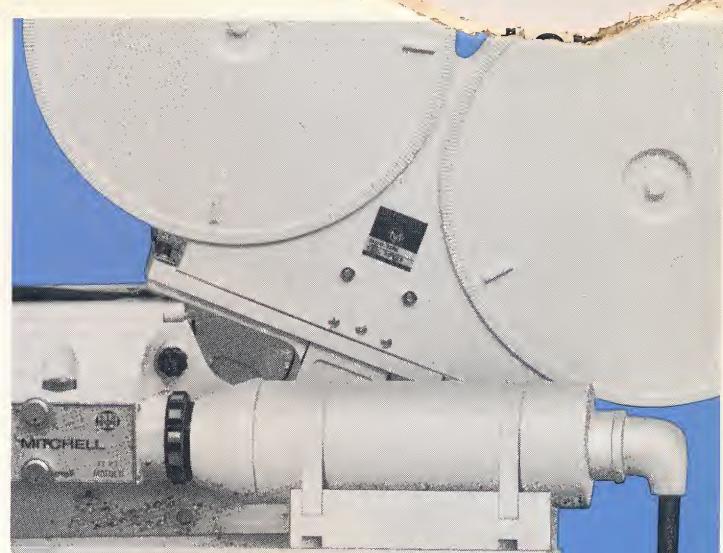
The camera's rotating-mirror, through-the-lens reflex viewing setup is a strong advantage in photo-instrumentation. Connected to a vidicon camera, it makes possible a simplified form of the ultimate System 35 technique: an integrated cinematographic system with simultaneous, parallax-free, closed-circuit TV viewing of the exact camera/film image, and with videotape recording for immediate previewing of exposed footage. Additionally, the unit can be completely controlled and monitored from as far as 2,000 feet away.



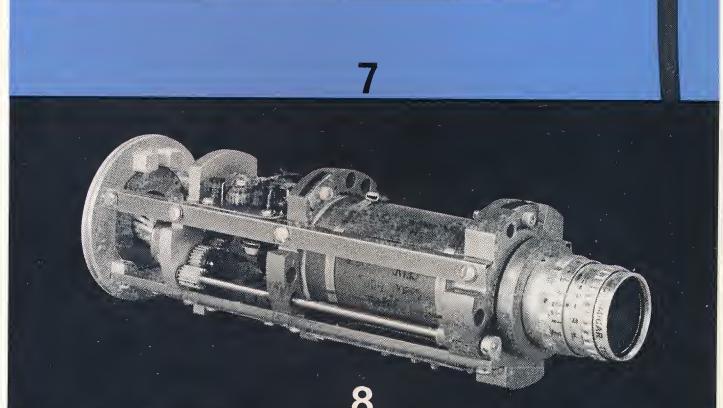
For remote operation, the camera is fitted with a Kintel Model 2000 vidicon camera (7,8), mounted so that it views the on-line image relayed through the camera focus tube. The vidicon unit uses a standard 16mm format, 50mm lens, and a special negative lens cemented to the tube face to correct for field curvature. Rugged and reliable, the Kintel Model 2000 produces 700-line horizontal resolution. For extremely critical applications, other vidicon cameras with horizontal resolution as high as 1,250 lines can be substituted. The vidicon unit is bracket-mounted and readily swings out of the way for easy loading of the System 35 Reflex.

Control of iris adjustment, focal length, and focus — as well as camera orientation — is handled by a single operator at a remote console. As he views a monitor screen that reproduces the exact image being filmed, he adjusts camera azimuth and elevation with a "joy stick" type of control linked electrically to the camera's remote-control mount. Other servo controls let the operator make all necessary lens corrections quickly and correctly to insure proper data acquisition and film exposure. Also available is a fully automatic exposure control system.

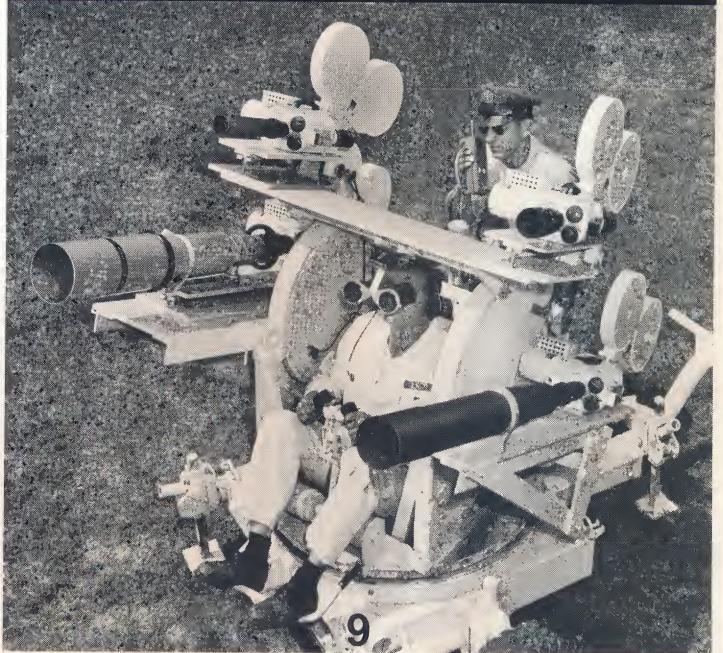
Cameras can also be set up and controlled manually for such range applications as multicamera missile tracking (9).



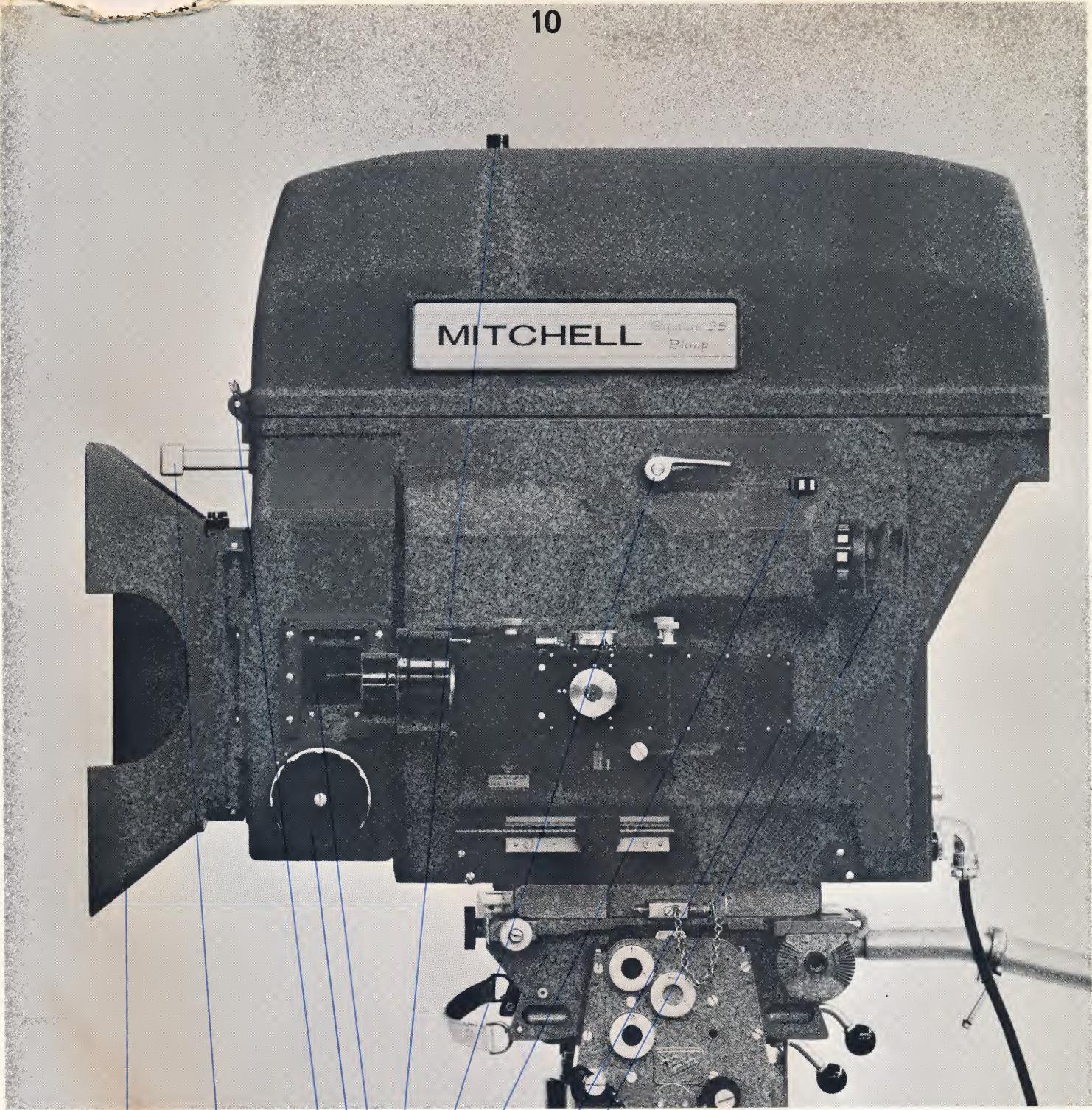
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8



9



Sunshade
Light support and handle
Quick disconnect magazine hood pivot
Focus control
Lens viewing port
Tally light
Door latch
Light trap control
Standard Mitchell finder with
parallax correcting cams
Reflex optical viewing eyepiece

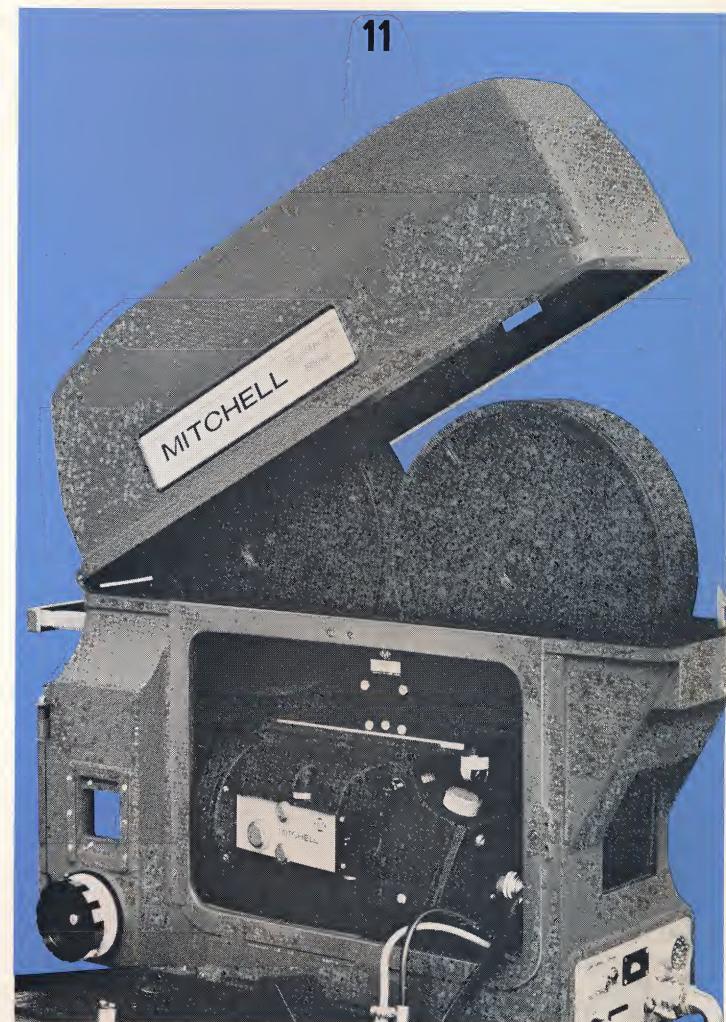
For unexcelled sound-stage performance, install the camera in the System 35 blimp for either vidicon monitoring or standard studio viewing

The compact, nearly noiseless System 35 blimp is a further extension of the camera system's modular concept. It can be used virtually anywhere because its internal wiring lets it operate on 120 VAC, single-phase, 50- or 60-cycle, or on 208 to 220 VAC, single- or 3-phase, 50- or 60-cycle. It works with synchronous motors in all those voltages and frequencies, and its built-in capacitors eliminate the need for capacitor boxes in the power line. It also accommodates both 35mm and 16mm reflex cameras, fitted with suitable magazines. And its sound-proofing features result in operation quieter than that of the famed Mitchell BNC.

For easy maintenance, cleaning, and shipping, the blimp separates into two parts by means of a quick-disconnect hinge between the top and the main housing. All doors and ports (quarter-turn locks) are large enough to assure generous, fast access to the camera. And all mechanical and electrical connections also are of the quick-disconnect type. Camera functions are controlled precisely by external knobs, buttons, and switches on the blimp. For the operator's convenience, full electrical controls for the camera, blimp, video, and audio functions are on the rear panel. Knobs for manual adjustment of focus and zoom are at the forward left and right sides. And the blimp has three internal, shielded lamps that can be lighted for clear observation (of magazine pulleys, lens setting, tachometer rates, and footage counter) through the large viewing ports.

The blimp's versatility is best exemplified by its interchangeable doors. The mechanical door (10) incorporates bright, crisp reflex viewing but retains mounting accommodations for the standard Mitchell external follow-focus viewfinder as well. The interchangeable electronic door has the reflex viewing feature plus an all solid-state, closed-circuit television system with an internal vidicon camera coupled to a camera-mounted viewfinder; the reflex and vidicon viewing systems can be used simultaneously (11). When either door is installed, the blimp's optical reflex system automatically aligns with the camera optics without any need for further adjustments by the operator. All optical surfaces throughout the system have nonreflecting coatings for maximum viewing performance.

The blimp is quickly adapted for use with special lenses. For exceptionally smooth zoom operation, a special extension snout attaches to the housing front to permit use of the Angenieux 25 to 250mm zoom lens. An optional motorized control also can be installed for accurate, steady remote operation of the zoom lens (three controls, governing in, out, and speed). To accommodate Panavision's "Panafocal" variable focal length lens, the blimp uses a modified zoom snout.



Watch it while you film it
with the ultimate capability:
the full Mitchell System 35,
combining the best of
two camera techniques

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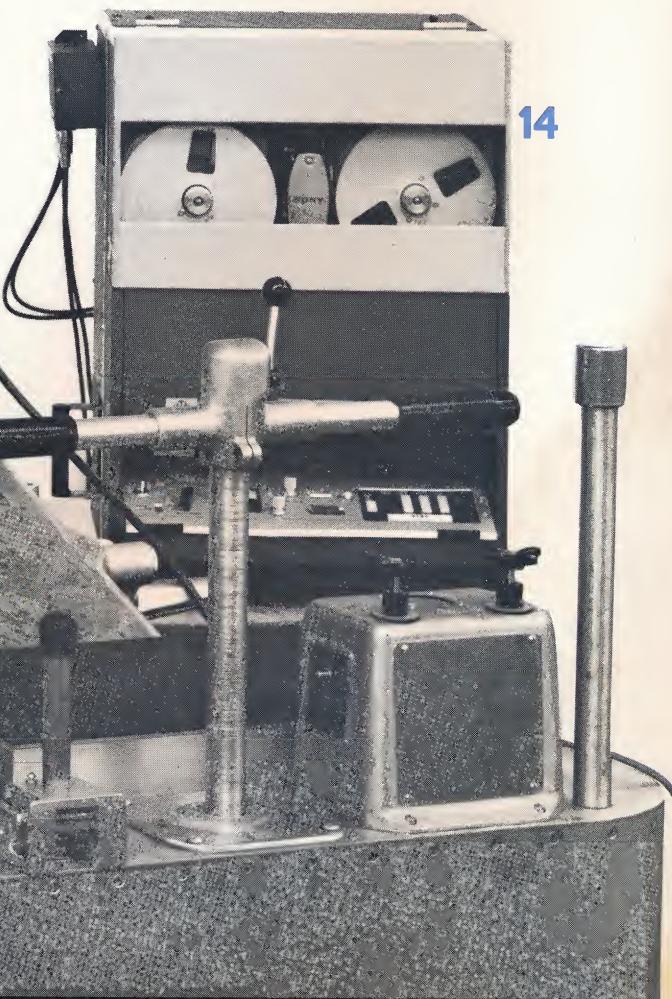
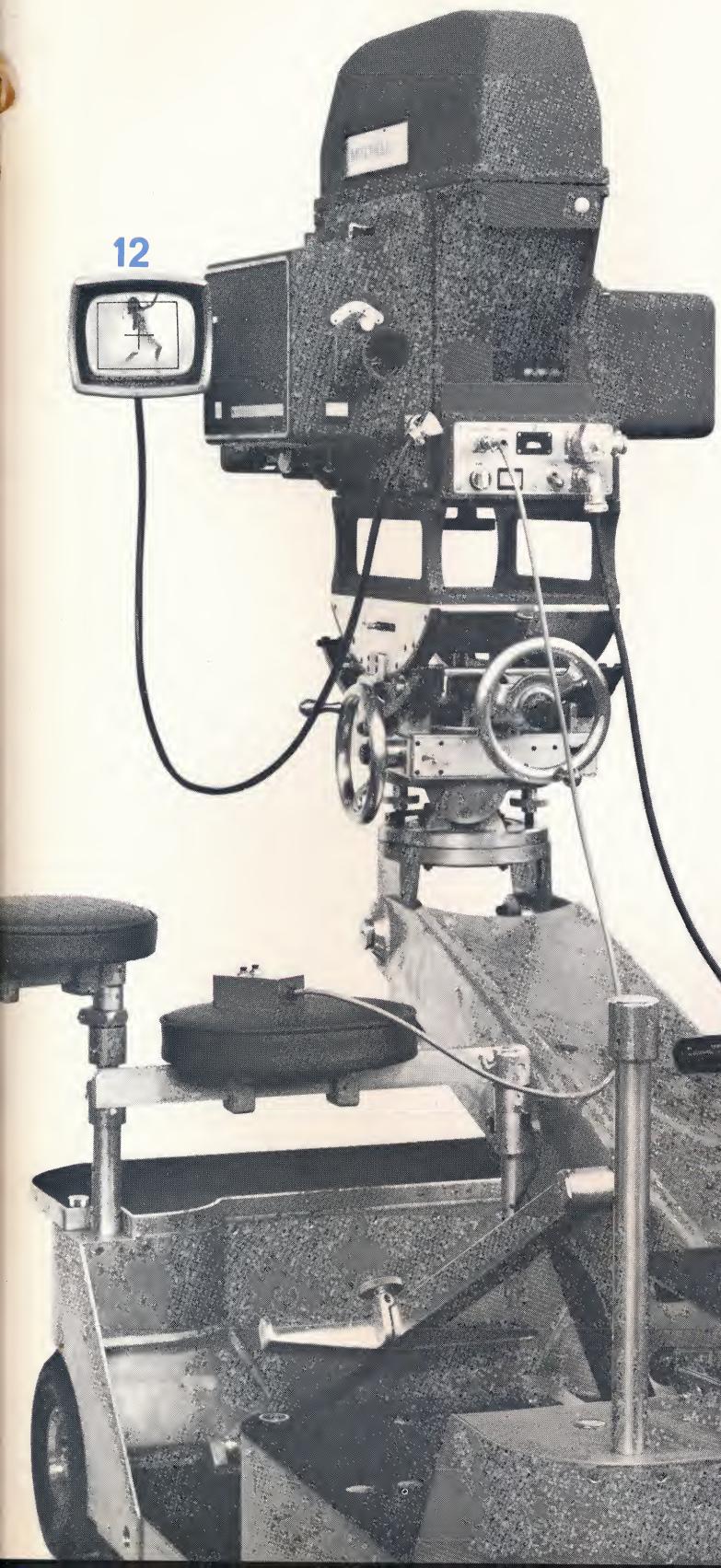
System 35 is a unique and simple manner to bring television techniques as tools for more proficient cinematography. With this integrated method, film-makers can speed their schedules, simplify difficult shooting problems, cut sound-stage filming time by at least 25%, and lower both production and equipment costs by about one third.

In this flexible and expandable closed-circuit system, the sound blimp has a special electronic door substituted for the standard studio blimp side door. The electronic door contains a special vidicon camera that scans the reflex image viewed through the camera lens. Automatically that image is simultaneously displayed on a blimp-mounted electronic viewfinder (12) as well as on an unlimited number of director-monitors. In a multiple camera setup, the director and director of photography can also monitor and coordinate a series of such cameras from a television-type console.

When the camera is in operation or at a standstill, the cameraman, director of photography, director, producer, and other interested persons can simultaneously see exactly what the camera sees at all times (13). Monitors can also be equipped with switches to compensate for the squeezing effect of anamorphic lenses.

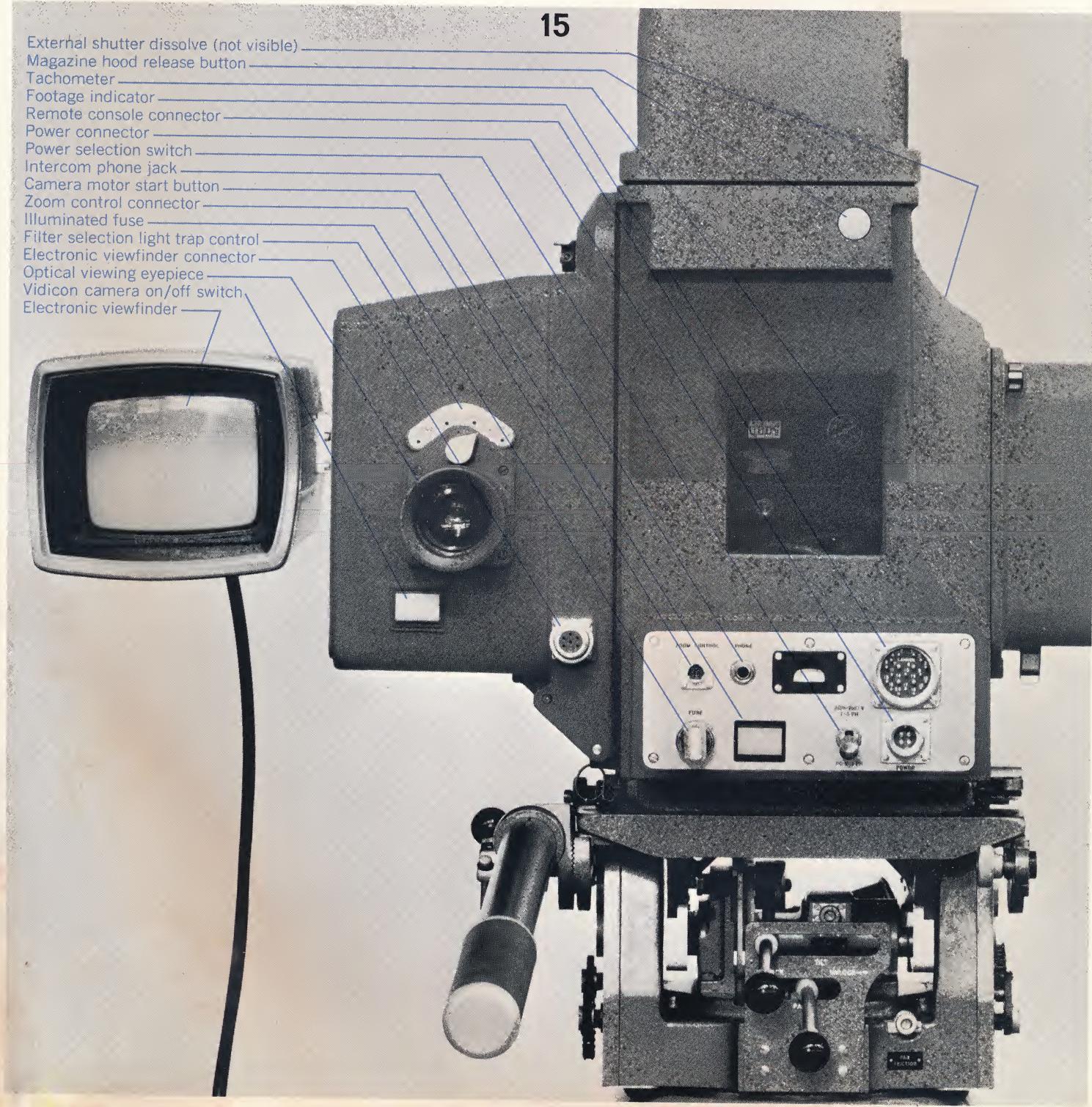
Then, as a final principal feature, the System 35 previewer (14) adds an entirely new dimension to cinematography. This compact video tape recorder can aid in rehearsals, help in composing difficult shots, and permit immediate viewing of scenes just taken, thereby eliminating guesswork as to what is actually on film.

For all studio work, System 35 gives creative film-makers an efficient cinematographic tool of a professional quality and performance not possible until vidicon and reflex viewing techniques were developed to their present state-of-the-art and successfully integrated by Mitchell.



Capabilities never before possible—with the immediacy of television and the superlative quality of film shot with the System 35 Reflex

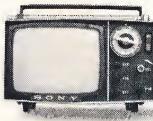
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The linking of the excellent System 35 Reflex camera into a high-performance, closed-circuit television system (15) takes place through Mitchell's electronic door and viewfinder, a rugged and reliable solid-state system that permits simultaneous optical and vidicon viewing.

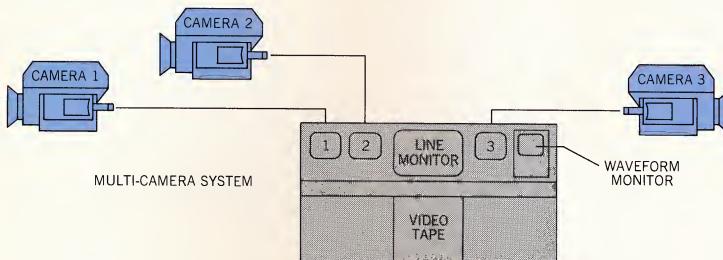
The door electronics include an internally mounted, specially designed vidicon camera (16) that uses a one-inch vidicon tube with a negative field-flattener cemented to its face. The camera directly feeds the electronic viewfinder, which is normally mounted on the camera door but can be turned for viewing from any position, on or off the camera. The viewfinder is a standard five-inch TV monitor modified to have 450-line horizontal resolution and durably repackaged for minimum size and weight. To the cameraman or his assistant, this unit displays a bright, crisp, high-resolution picture — free from parallax and appreciable flicker.

Director-monitors in the system are high-resolution, closed-circuit television monitors in optional screen sizes ranging from 8 to 27 inches. For effective convenience and portability, standard five-inch Sony monitors also can be used with System 35 as set monitors.



The previewer is a modified Sony Model PV-120 series video tape recorder (17) that can be either rack-mounted or used as a fully self-contained console. Compact and portable, the unit has slow motion and stop motion, and permits instantaneous switching from record to playback mode.

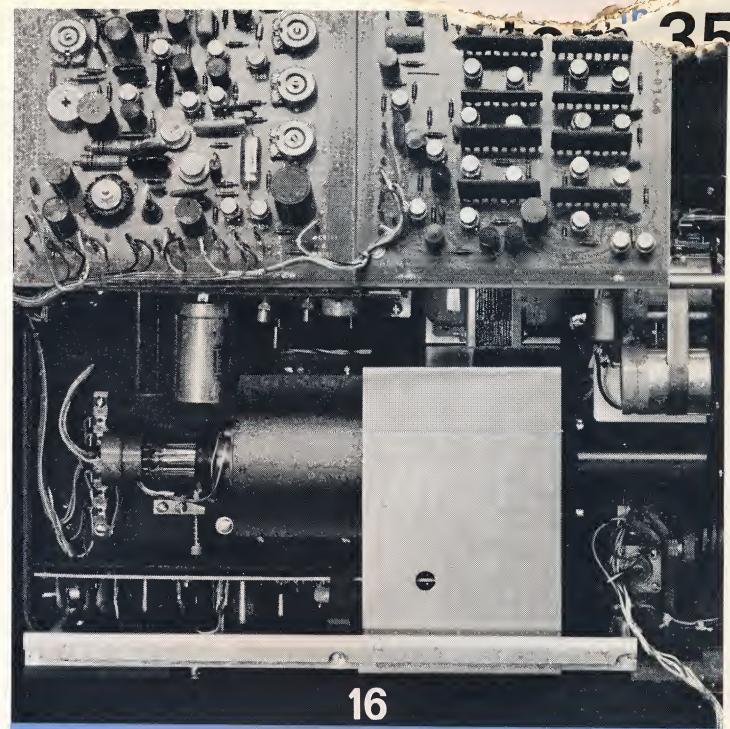
For multicamera shooting, Mitchell makes available a remote monitor/control console that holds up to four rack-mounted, 8-inch monitors for individual cameras and a central 14-inch "line monitor." Camera operation, zoom control, intercommunication, and other functions can all be controlled remotely through this console's switching gear.



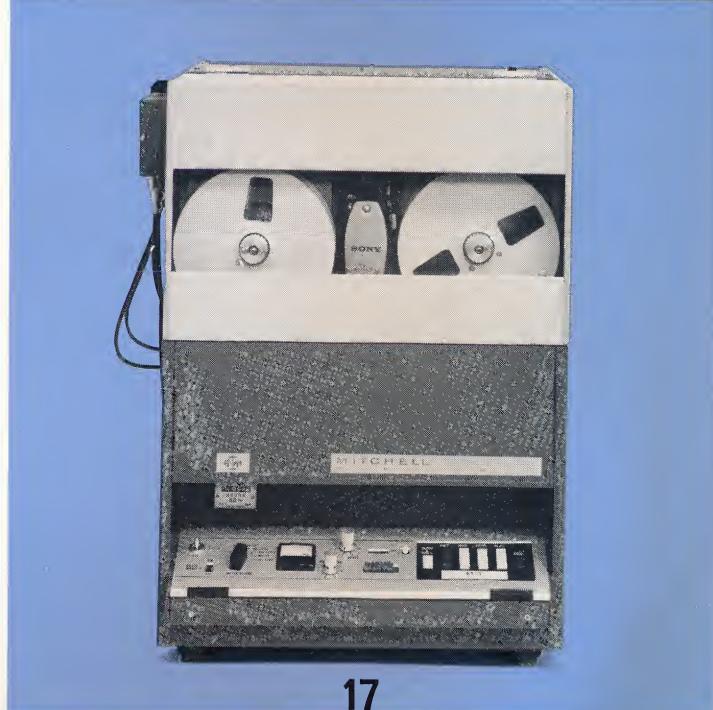
The video tape previewer can be incorporated into the console, as can a wave form monitor for fast, precise measurement and analysis of scene brightness.

System 35 makes possible a number of instant improvements in film-making: (A) greatly reduced rehearsal time — scenes can be composed and viewed without the camera running; (B) fewer takes, since directors can monitor the actual filming; (C) immediate playback by the previewer — actors can thus see their own performances and better understand necessary alterations; (D) the previewer's slow-motion and stop-motion capabilities help greatly in reviewing and setting up difficult shots; (E) zoom action can be followed on all monitors; and (F) many tight shots that are awkward or even unmanageable with the Mitchell BNC are made easily with the System 35 Reflex camera.

With many new applications likely to evolve through everyday use, one thing is certain: the development of System 35 marks the creation of a new 'third world' of motion picture camera technique that gives the cinematographic profession the latest state-of-the-art tool for polishing and smoothing many facets of the film-making business.



16



17

SPECIFICATIONS

THE SYSTEM 35 REFLEX CAMERA

Film Transport: Dual register pins, four-pin pull-down claw, with quick pin-disengagement for fast threading and keyed drive for foolproof installation.

Frame Rate: From stop motion to 128 frames per second, variable.

Aperture Plate: Hard chrome-plated stainless steel construction, simple mounting with single bayonet lock. Double thickness filter holder. Full frame opening is 0.980" x 0.735" with mattes available for academy or special configurations.

Shutter: Focal plane, disc type, adjustable from 0° to 170° at all camera speeds. Adjustable stops are provided for pre-setting. Shutter adjustment knob can be set in one of three positions: locked, detented, or free for operation through blimp shutter mechanism.

Viewing: Through-the-photographic-lens, via parallax-free rotating mirror. System features: high-low magnification, color and monochrome filters, light trap, wide field eyepiece, and high image brightness resulting from aluminized mirrors and high aperture optical system.

Ground Glass: Interchangeable, with larger-than-full-aperture viewing area. Etched outlines and center markings for standard and special aspect ratios; matte slide provisions for special effects photography.

Lens Mounting: Single- or three-lens turret, with quick-acting, positive-locking bayonet mounting. Adjustable set screws under locking springs assure zero-play engagement. Lenses optically centered on full aperture in standard configuration; other locations optional.

Counters: Easy-to-read foot and frame, external reset, visible from camera rear.

Tachometer: Indicates frame rates from 0 to 128 fps, visible from camera rear.

Safety Switches: Two manually reset film buckle switches (one entrance, one exit) cut off power to motor in event of film break or jam.

On-Off Controls: Three switches—one on-off on camera body, one burst switch on camera body, one with each motor control.

Pulse Generator: Built-in, independent of camera drive motor, and compatible with all major synchronous sound tape recorders.

Timing Lights: Dual neon lamps (optional) are internally mounted for timing or coding on both film edges. Location is plus or minus one perforation, regardless of threading.

Mid-Shutter Indication: Internally mounted (optional), provides phase adjustable contact closure at any preselected shutter position.

Drive Mechanism: Combines precision gears and toothed timing belts for maximum power transfer efficiency at minimum noise level. All components mounted on precision, lifetime-lubricated ball bearings.

Take-Up Drive: (1) Top load, via continuous belt coupled through camera top, with belt captured by pulley shoe to prevent accidental disengagement; (2) slant load, via gear coupling to magazine adaptor and belt coupling to magazine; and (3) underslung, via gear coupling and built-in drive belt on magazine. All take-up modes receive power through an adjustable clutch built into camera body.

Magazine Mounting: Standard Mitchell—lip and single mounting screw.

Magazine Capacity: All standard—200', 400', 1,000' and 1,200' capacity.

Motors and Lenses: Interchangeable—see Accessories.

Operating Noise: Unblimped, 43 to 45 db measured at three feet, with synchronous motor and 1,000' top-mounted magazine.

Size: 14" high x 19" long x 10" wide (over-all dimensions for camera equipped with var. speed, 110V motor and 400' top-mounted magazine, less lens).

Weight: 25½ lbs. (with 400' magazine and 110V var. speed motor, without lens and film).

SYSTEM 35 BLIMP

Power Requirements: Internally wired for 120 VAC, single-phase, 50- or 60-cycle; or 208/220 VAC, single- or three-phase, 50- or 60-cycle. Positive lock switch on control panel must be set to correct voltage; illuminated fuse on control panel protects transformer if switch is set incorrectly.

Motors: Accepts synchronous motors in all voltages and frequencies detailed under Power Requirements. Built-in capacitors eliminate need for capacitors in power line.

Electrical Controls: Rear panel-mounted, these include: power connector, illuminated motor switch, illuminated fuse, remote console connector, phone jack, and power zoom control connector.

Mechanical Controls: Manual zoom and focus control knobs on both right- and left-hand sides. Shutter control is brought out on motor side for shutter adjustment or dissolve. Single switch is located forward of motor housing for turning internal observation lamps on and off.

Indicator Lamps: Red tally lamp on blimp top lights whenever film camera is running; motor switch on control panel also lights when camera is running. Transformer fuse illuminates when blown.

Mechanical Door: Contains relay optics that transmit reflex image from camera focus tube to eyepiece; provision retained for mounting standard Mitchell finder on horizontal centerline of taking lens.

Weight: Approximately 136 lbs., complete with camera motor, magazine, and lens.

Electronic Door: Solid-state circuitry for vidicon viewing via externally mounted viewfinder (and other remote monitors), plus simultaneous optical reflex viewing.

Power Requirements—Electronic Door: 110 VAC, 60-cycle (supplied by secondary of blimp transformer regardless of input voltage); optional rewiring for operation on 50 cycles. Total power consumption: 35 watts.

Resolution—Electronic Door: Vidicon camera has 650-line horizontal resolution; viewfinder has 450-line resolution.

Zoom Snout: Optional accessory, with viewing ports and control knobs, for use with Angenieux 25mm to 250mm zoom lens. Also available: motorized zoom control for remote operation.

DIRECTOR-MONITORS

Type: High-resolution Conroc (custom-manufactured for System 35).

Sizes: Various, from 8 to 27 inches in screen size.

Special Control: Deanamorphosing switch (optional) compensates for horizontal squeeze of anamorphic lenses to present monitor picture in proper perspective, as it would be viewed on screen.

VIDEO TAPE PREVIEWER

Dimensions: 17½" wide by 25" high by 16¾" deep.

Construction: Fully transistorized, modular construction. Weight: 145 lbs.

Tape Speed: Record and normal playback, 4¼ inches per sec. This allows 84 minutes of recording on 7-inch reel, 1,800 feet of 1-mil tape.

Slow Motion: Forward and reverse, continuously variable from stop motion (zero ips) to ⅓ normal speed.

Still Picture: Freeze frame for up to 15 minutes.

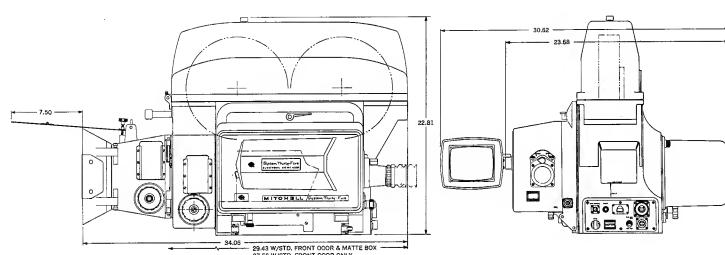
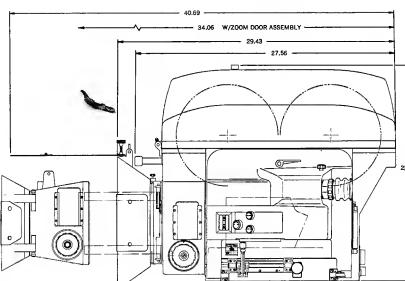
Power Requirements: 117 VAC, 60 cycles—approx. 350 VA

MULTICAMERA CONSOLE

Monitors: One 14-inch line monitor and up to four 8-inch monitors (Conrac); power consumption approx. 700 watts.

Wave Form Monitor: One (optional) for scene brightness (mfd by Tektronix); power consumption 200 watts.

Controls: Console-mounted for remote camera operation, camera selection, zoom control, intercommunication, and pre-viewer control.





Interchangeable Motors: Synchronous, 115 to 220 volts. Single and 3-phase, 50-60 cycles, 24 volts DC, and 115 volts AC-DC. High speed, 115 volts AC and DC. All DC motors constant-speed, governor-controlled.

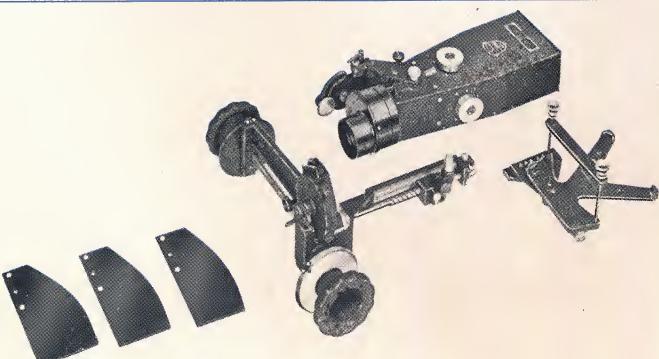


Lenses: These fixed focal length lenses are available for the System 35 Reflex camera: Bausch & Lomb Super Baltar lenses — 20mm, T2.3, 25mm T2.3, 35mm T2.3, 50mm T2.3, 75mm T2.3, 100mm T2.3, and 152mm T3.0.



Zoom Lens and Snout: 25mm to 250mm, f3.2 Angenieux (other lenses can be factory-equipped with System 35 mounts on special order). Accessory zoom snout replaces blimp-front port to permit blimped use of zoom lenses.

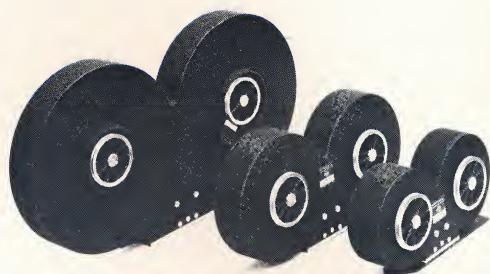
Zoom Control: (not shown) Motorized control available for remote operation of zoom lens. Three controls: in, out, and variable speed.



Follow-Focus Attachment: Mounts to matte box, permitting full manual follow-focus control for production filming with either studio or reflex viewfinders.



Universal Matte Box and Support Base: Accepts all lenses, 20mm and up. Has built-in extension shade, filter, and Polascreen holders.



Magazines: The System 35 Reflex takes all standard magazines: 200', 400', 1,000', and 1,200'. Also accepts 400' inverted magazine, with shoulder support cushion and optional pistol grip.

Specially modified zoom snout to accommodate Panavision "Panafocal" lens, a vari-focal anamorphic lens with operation range of 50mm to 95mm.

Filter punch for cutting gelatin filters for aperture plate holder (six from a 3" gelatin square).

Matte punch for cutting precise pin-registered frame of film for use in front of ground glass as reference in special effects work.

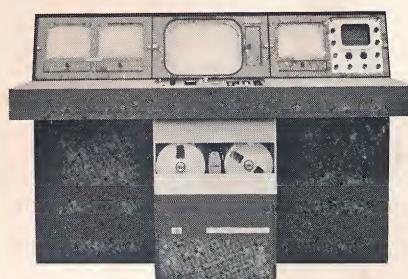
Cases of special, durable aluminum, foam-lined for maximum protection of camera, blimp, and related equipment.

Riser plate: A special riser assembly is available for System 35 and required when the blimp is installed on a geared head.

Video accessories

Closed-Circuit Monitors: All television monitors (Conrac and Sony) in various optional sizes from 5-inch portables up to 27-inch director-monitors.

Previewer Video Tape Recorder: Modified Sony PV-120 (see Specifications and preceding text).

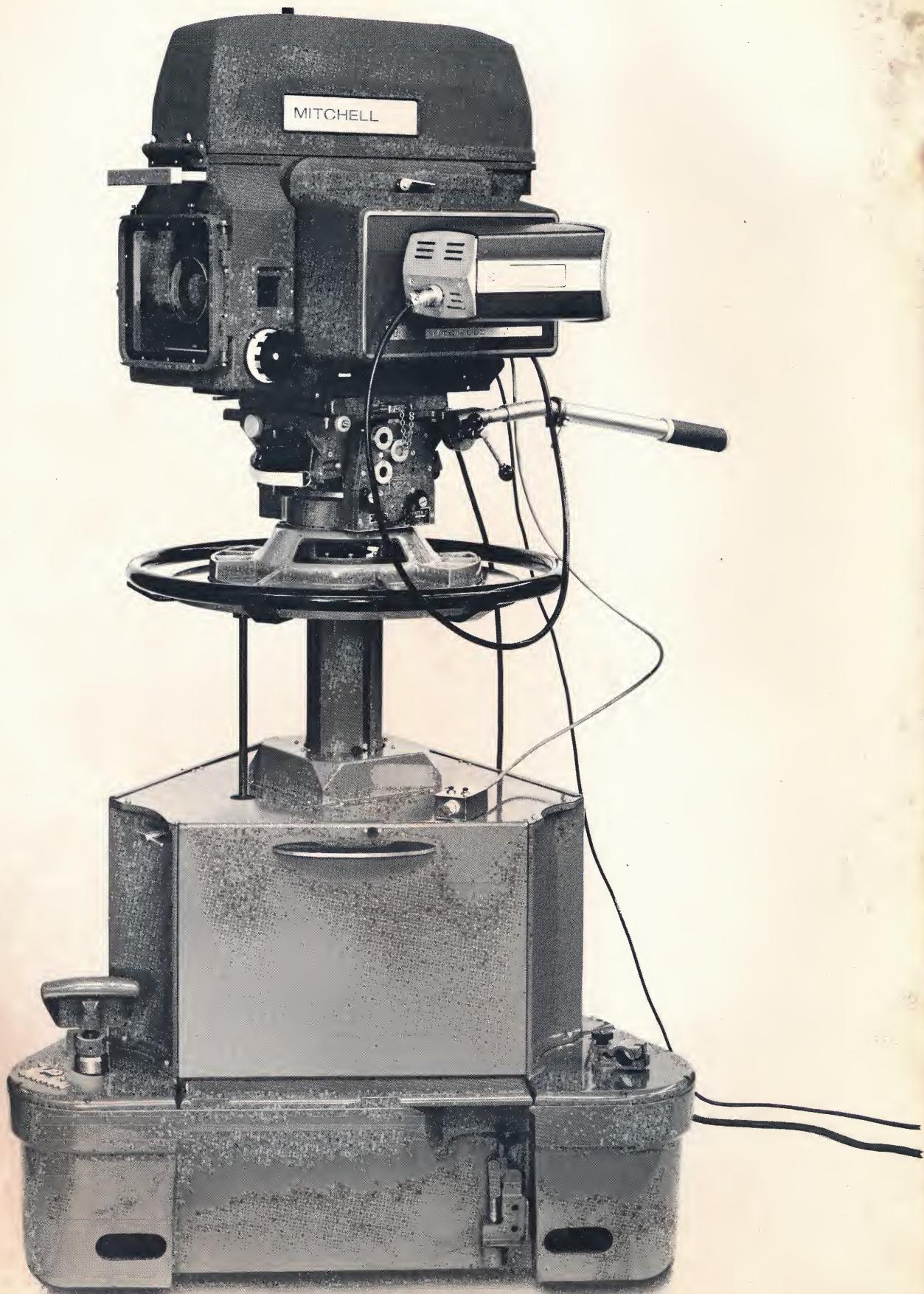


Multicamera Console: For complete remote direction and control in multicamera applications. Individual camera, line, and scene brightness monitors. (See Specifications.)

MITCHELL SYSTEM 35



Mitchell Camera Corporation / 666 West Harvard Street, Glendale, California 91204 / Phone: (213) 245-1085 / Cable: MITCAMCO



Mitchell S35R 35mm reflex

PRICE LIST

Model/ Part No.	Unit Price	Model/ Part No.	Unit Price
Mitchell 35mm S35R Reflex Camera with built-in features — "pic-sync" pulse generator & aluminum foam lined carrying case	\$6,120.00	MATTE BOX AND SUNSHADE:	
LENSES:		Matte Box, complete with 5" Square filter & Pola Holders & camera base plate	11R-2307 550.00
20mm T3.0 Super Balta Lens	775.00	3-inch Filter Holder Frame Adapter	11B-2047 20.00
25mm T2.3 Super Balta Lens	625.00		
35mm T2.3 Super Balta Lens	600.00	DIFFUSION GLASS AND FILTERS:	
50mm T2.3 Super Balta Lens	575.00	5-inch Square Diffusion Glasses—A thru E	11B-2314 35.00
75mm T2.3 Super Balta Lens	625.00	3-inch Square Diffusion Glasses—A thru E	DG-1 30.00
100mm T2.3 Super Balta Lens	650.00	5-inch Square Color Contrast Filters	each 35.00
152mm T3.0 Super Balta Lens	675.00	5-inch Square Neutral Density Filters	35.00
25mm to 250mm T3.9 Angenieux Boom Lens including lens support	2,300.00	3-inch Square Color Contrast Filters	9.00
Varifocal close-up unit complete with lens & carrying case (permits macro & micro photography)	MGV 250.00	3-inch Square Neutral Density Filters	11.50
Full aperture optically centered turret (triple lens)	11C-581 150.00	4-inch Diameter Pola Screen with Holder	11B-2311 50.00
GROUND GLASSES:		Special filters made to order	
Academy Projection Outline	11B-2016 30.00	MAGAZINES:	
TV Projection Outline	11B-2354 30.00	400 foot inverted Magazine	11D-2194 220.00
Full Projection Outline	11B-2385 30.00	400 foot Standard Magazine	S4L 145.00
1:85 to 1 Projection Outline	11B-2360 30.00	1000 foot Sound Magazines	NC10B 225.00
Combination & special aspect ratios made to order.		Magazine Adapter (For slant back configuration)	11D-4006 220.00
HARD MATTE: (ACADEMY-PROJECTION APERTURE)		MOTORS:	
Movement Aperture Matte	11B-4285 5.00	24 volt Governor controlled variable constant speed motor & cable 8-32 F.P.S.	11E-2565 725.00
Viewing Tube Matte	11A-1572 5.00	115 volt AC/DC Governor controlled variable speed motor & cable 8-32 F.P.S.	11D-2247 675.00
Special Aspect Ratios Made to Order		115/50/1 ϕ Synchronous Motor & Cable	11D-2162 575.00
FINDERS:		115/60/1 ϕ Synchronous Motor & Cable	11D-2553 575.00
Automatic Focus Viewfinder, required for use with Follow Focus attachment or blimp	MKII AN 1,050.00	220/50/3 ϕ Synchronous Motor & Cable	11D-2615 625.00
Manual Focus Viewfinder	STD-NC 900.00	220/60/3 ϕ Synchronous Motor & Cable	11D-2617 625.00
Third Set adjustable mattes for above finders	325.00	115 volt Universal High Speed Motor & Cable 24-120 F.P.S.	11D-2147 550.00
Reducing Finder Adapter Lens, (required for use with studio finders when 25 thru 35mm lenses are used with camera)	FA-1 65.00	Variac (A/C operation only) 115v	11A-1327 50.00
Tracking Finder (frame type for use with 50mm lenses or longer)	11B-2361 138.00	Control Box (for 115v High Speed Motor)	11D-1398 140.00
FOLLOW FOCUS UNIT:		115v 50/60/1 ϕ Animation (Stop motion) Motor (single frame or continuous operation at 70 frames per minute)	600 935.00
Follow Focus complete with 3 cams & gear rings	11E-2255 825.00	Remote Control Cable for Variable Speed Motors	11B-706 15.00
Lens Gear Rings	11B-2234 15.00	Remote Control Cable for Synchronous Motors	11B-1193 15.00
Follow Focus Cams	15.00	Special Motors made to order	
		TRIPOD HEADS:	
		Light Weight Friction Head	1-U-70 550.00
		Triplex Ball Bearing Head	BB 850.00
		Worrall Gear Head & Case	1,785.00

Prices quoted are net F.O.B. Glendale, California, exclusive of applicable Federal Excise Taxes and are subject to change without notice. Prices prevailing at time of shipment apply.



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Model/ Part No.	Unit Price
TRIPODS:	
Standard Tripod	S 200.00
Baby Tripod	BT 110.00
Heavy Baby Tripod	HBT 200.00
Standard TV Tripod	STV 225.00
TILTHEAD ADAPTERS: (HI-HAT)	
Standard Hi-Hat	THA 35.00
Triplex Hi-Hat	BB 35.00
Magazine Hi-Hat (400 foot inverted magazine)	11D-2181 75.00
CARRYING CASES: (Aluminum & Foam Lined)	
Motor Case (Accommodates 2 motors & accessories)	A-206 W/219 125.00
Accessory Case (Accommodates matte box, follow focus, finder & base plate)	A-205 W/220 200.00
Magazine Case (Accommodates four 400 foot Mark II or Standard Magazines)	A-206 W/221 125.00
Lens Case (Accommodates seven lenses, filter holder, lens cleaner & adapter)	A-217 W/222 125.00
Protective Black Canvas Zippered Covers	A-213, A-214, A-224 40.00
CARRYING CASES: (Standard Metal Covered)	
Motor Case	A-196M/A-225M 55.00
Magazine Case for two 1000 foot sound magazines	A-43M 50.00
Magazine Case for four 400 foot standard magazines	A-41M 50.00
BLIMP:	11R-3500 5,000.00
Extension Housing for Zoom Lens (includes gear rings for zoom lens & sunshade)	11C-3150 1,000.00
Motorized Zoom Lens Control	11C-3320 750.00
Finder Harness & Cam Bracket	11B-2420 100.00
Lens Gear Rings	11B-2234 15.50
Blimp Lens Cams	15.00
MATTE CUTTER:	MP-53-2 100.00
MISCELLANEOUS:	
Camera Base Plate with two rods	11E-1415 138.70
Dust Covers for Camera	AI-24-18 3.00
Camera Oil, 2 oz. bottle	A-111 .50
Lens Cleaner, 2 oz. bottle	A-110 .25
Oil Can	.35
Pistol Grip	11D-1328 60.00
12 Gelatin filters & Case (specify full or academy aperture)	40.00
Gelatin filter punch	MP-53-1 70.00
400-foot Leather Belt	11A-4357 2.00
1000-foot Leather Belt	11B-4355 3.00
Belt protector (400 ft. inverted magazine)	11B-2228 20.00
Dual timing light assembly installed internally in camera	225.00

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Charlton Heston, one of the world's great actors, is also a great home movie fan. He constantly shoots footage of his family and his fellow actors. The Heston family uses a Pathe-Noris 820 projector for showing. Why?

Says Charlton: "I'm very critical of a projected picture. It's my business. I own a Pathe-Noris 820 because of its exceptional brightness. Also, this projector lets me do my own editing and sound synchronization with great ease. Of all the 8 mm projectors I've tried, this one, the Pathe-Noris 820, consistently produces the best results."

See Charlton Heston in "The Greatest Story Ever Told" and in "The Agony And The Ecstasy," a portrayal of the immortal Michelangelo.

See for yourself why the Pathe-Noris 820 "consistently produces the best results." Available exclusively through Pathe Authorized Dealers. You'll find that Pathe Authorized Dealers are better dealers. Get the Pathe feeling of professional quality.

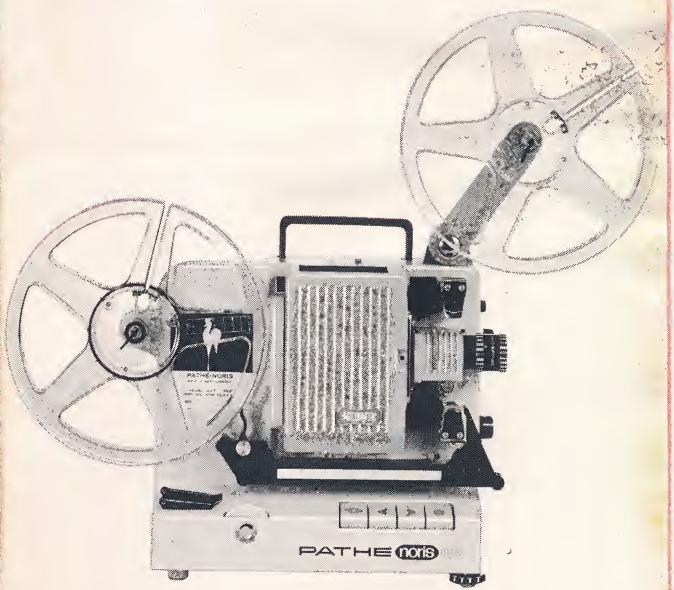


TRADEMARK OF QUALITY SINCE 1896

PATHE PRODUCTS, INC., 153 DABOLL ST., PROVIDENCE, R. I. 02907

NEW FROM PATHE FOR THE USA!

THE EFFICIENT ONE!



PATHE noris 8 mm

- TOTAL AUTOMATION
- EXTREMELY BRILLIANT IMAGE
- SYNCHRONOUS SOUND SYSTEM
- UNIQUE SINGLE FRAME PROJECTION
- COMPLETE ACCESSORY SYSTEM

TOTAL AUTOMATION PROJECTION SYSTEM

What makes this projector totally automatic?

The automatic one-hand threading system threads itself into the take-up reel automatically. The loop former recedes automatically. The lamp switches on automatically. And the system is foolproof and jamproof. Furthermore, the Pathe-Noris unique film cleaning attachment (available as a separate accessory) will enable you to clean and preserve the condition of your irreplaceable films during projection, automatically.

What makes this projector a complete 8 mm system?

Unique frame-by-frame forward and reverse still projection control makes the Pathe-Noris projector an editor as well. A special cable release operated knife will notch precisely the frame you are viewing. The detachable film guide channel allows you to cut and splice while the film remains in the projector. With the amazingly brilliant Pathe-Noris film viewer (a separate accessory) you can edit in daylight.

What makes this projector so efficient?

Extremely brilliant light source with ultra efficient, super quiet cooling unit. Simplified lamp centering adjustment. Exact framing by means of a double claw mechanism. Holds frame line even in reverse. Accurate micro focusing. Fast direct rewind. Easy speed regulation from 8 to 26 FPS and automatic safety screen if under 8 FPS. Easy elevation and tilting adjustments. Simplified, foolproof, luminous push button operation. Forward and reverse movie or still projection. Whisper silent projection. Special room light socket. Accepts 400-foot reels. Use anywhere—just dial local voltage (110-240 volts). Aluminum die cast body. High quality dependable machined parts. Maintenance? Zero.



ADDITIONAL FEATURES ON 820 SERIES

Perfect Sync: Add living, synchronous sound to your films with 400 ft. \pm 0.1 sec. accuracy. Add the full enjoyment of modern standard 3 $\frac{3}{4}$ IPS hi-fi and stereo tape recorders. The built-in Pathe-Noris sound Synchromat system lets you record music, speech and sound effects in perfect synchronization with amazing ease so that even your first attempts will amaze and inspire you!

Recording Ease: All you need is the Pathe-Noris 820 plus any standard 3 $\frac{3}{4}$ IPS tape recorder of your choice. Once the projector is coupled to the tape recorder by the tape (see illustration below) all controls of this projector-tape recorder system are then done automatically through the tape recorder control panel. Whatever you require — background music, speech or sound effects — you will be surprised to find that all can be done so easily — and with such accurate synchronization.

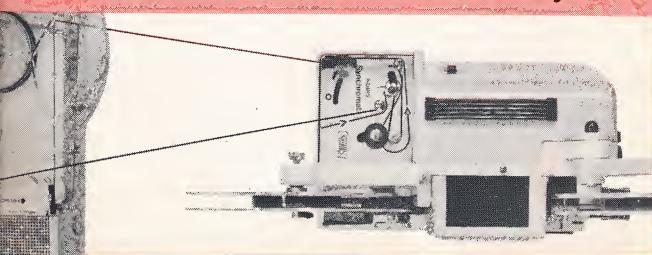
Sound Editing: This automatic Pathe-Noris sound system makes editing and re-recording of the sound track extremely easy. If you make a mistake you can have both film and tape run back without disturbing the picture/sound synchronization, and you can start with new recordings at any point you like. The desired picture with which the new recordings should begin is visible on the screen.

Playback: Capture the creative enjoyment of a professional movie maker. With Pathe-Noris sound Synchromat system you can enjoy full sound track of hi-fi and stereo tape equipment. Thus your film-sound showings take on the qualities of professional movies.

Stroboscope: The Pathe-Noris 820 is also fitted with a stroboscopic device which enables you to maintain exact 16 FPS speed during projection.

Lamp Dim Switch: Lamp voltage can be reduced from 12 to 10 volts by means of a simple switch. This is very useful for editing, for close distance projection and for over exposed film projection. Lower voltage is also economical.

400 ft. \pm 0.1 sec. accuracy



OUTSTANDING FEATURES 810 and 820 SERIES

Automatic Threading: The Pathe-Noris has total automation. Foolproof, jamproof, reel-to-reel one-hand threading means you get complete automation for every film length — all without cartridge or magazine limitation. The loop former automatically recedes, and the lamp switch goes on, also automatically. Most versatile and automatic system yet!

Extremely Bright Light: The Pathe-Noris uses a low voltage 12v/100w lamp, a special lamp centering device, and advanced condensing system to give you extremely brilliant image projection. The efficient, noiseless blower-cooler keeps the projector at the best operating temperature at all times.

Micro-Focus Lens System: The Pathe-Noris uses needle-sharp, tru-color corrected f1.3 20 mm lens. Models 810Z and 820Z feature a brilliant f1.6 15-25 mm zoom lens with useful, easy-to-use separate zoom ring and accurate micro-focusing wheel. All models have this special built-in micro-focusing to give you exceedingly sharp images at your fingertip.

Push-Button Ease: Luminous push-button control panel and fingertip rheostat wheel at your service. You have precise command of instant forward and reverse. Control speeds with your fingertip. Brilliant image from 8 to 26 FPS. Under 8 FPS or still projection fully protected by automatic safety screen. A separate push-button control gives you instant single-frame projection. Release the button and the film immediately continues in the original forward or reverse direction.

Editing System: You can use your Pathe-Noris for editing without a separate editor. The unique frame-by-frame forward and reverse push-button control combined with a built-in cable release operated knife will notch the frame you are viewing. You can even edit and splice while the film remains in the projector.

Direct Rewind: Film take-up uses direct action with one folding geared arm. No belts. Simple, direct rewind system eliminates the bother of switching reels.

Local Voltage Dial: You can project anywhere in the world with the Pathe-Noris. Without changing lamp simply set the special voltage selector to match local current strength. Anytime is showtime with the Pathe-Noris.

PROFESSIONAL RESULTS AUTOMATICALLY



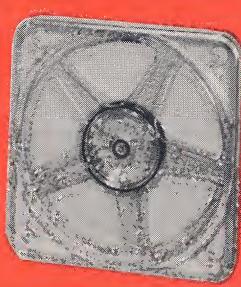
COMPLETE PROFESSIONAL 8 MM PROJECTION SYSTEM

Pathé - Noris Film projection, automatically, saves your time, and effort. Cleans and protects your films during

Pathé - Noris Viewer. Amazingly brilliant film viewer lets you

project even in lighted rooms. Ideal for movie editing.

Pathé - Noris 200' or 400' Reels; Each reel comes in its own see through library case for film protection, easy storage and labeling.



AUDIO-VISUAL AND INDUSTRIAL LINE SYSTEM



USER'S NET PRICE LIST

CODE	ITEM	USER NET

PATHE PROFESSIONAL SUPER 8 MOVIE EQUIPMENT

PATHE PROFESSIONAL REFLEX DOUBLE SUPER 8 AUTOMATIC
THREADING CAMERA WITH BTL - BEHIND-THE LENS EXPOSURE
METER AND ACCESSORIES

8184	PATHE PR DS8/BTL with ANG ZOOM 8-64 f1.9	920.00
600	SET OF 400' MAGAZINES	314.50
650	ONE MAGAZINE, 400'	124.50
700	KOMPENDIUM with base	104.50
701	BASE ONLY	19.95
702	KOMPENDIUM without base	84.55
715	8-80 WILD MOTOR with tachometer	299.95
725	8-80 RECHARGEABLE BATTERY	99.95
735	8-80 AC CONVERTER & CHARGER	149.95
780	EXTENSION TUBES (set of 4)	15.00
790	CAMERA CABLE RELEASE	4.95
795	CAMERA PISTOL GRIP	18.75
802	COMPARTMENT CASE, leather	49.95
803	COMP. CASE, heavy duty aluminum	120.00
806	FLAT RUBBER EYEPIECE for camera	2.25
807	MICROSCOPE ATTACHMENT for camera	39.95
808	COVER for manual use of AT system	5.95
809	PERISCOPE VIEWFINDER ATTACHMENT for camera	119.95
3150	PATHE TRICKMASTER complete titler for all reflex cameras includes drums, turntables, flip-flop boards, ground glass, etc.	99.95

RADIANT-PATHE, INC. 8220 NORTH AUSTIN AVENUE, MORTON GROVE, ILLINOIS 60053

Effective February 1, 1966 this price list voids and supersedes all previous price lists. We reserve the right to alter prices and design without notice.

AUDIO-VISUAL AND INDUSTRIAL LINE SYSTEM

PATHE
TRADEMARK OF QUALITY SINCE 1896

USER'S NET PRICE LIST

CODE	ITEM	USER NET
PATHE PROFESSIONAL SUPER 8 MOVIE PROJECTORS AND ACCESSORIES		
3830	PATHE NORIS SUPER 8 fully automatic projector w/f1.3 25mm lens, reel-to-reel auto threading, extremely brilliant light, quartz iodine lamp.	179.95
3830Z	PATHE NORIS SUPER 8 fully automatic projector w/f1.6 19-30mm zoom lens, reel-to-reel auto threading, extremely brilliant light, quartz iodine lamp.	199.95
3840	PATHE NORIS SUPER 8 fully automatic projector w/sound synchromat twin track system w/400' plus or minus 0.1 sec. accuracy f1.3 25mm lens, reel- to-reel auto threading, extremely brilliant light, quartz iodine lamp, dimmer switch.	209.95
3840Z	PATHE NORIS SUPER 8 fully automatic projector w/sound synchromat twin track system w/400' plus or minus 0.1 sec. accuracy, f1.6 19-30 mm zoom lens, reel-to-reel auto threading, extremely brilliant light, quartz iodine lamp, dimmer switch.	229.95
3901-S	PATHE NORIS DE LUXE projector case	14.95
3902	PATHE NORIS automatic film cleaning system	9.95
3903	PATHE NORIS editing viewer	19.95
3980	PATHE NORIS SUPER 8 12V/100W quartz iodine lamp	8.80
3981	PATHE NORIS SUPER 8 endless spool system	9.95
3982	PATHE NORIS SUPER 8 twelve 200' reels, each in case	16.80
3983	PATHE NORIS SUPER 8 twelve 400' reels, each in case	23.40
4002	MURAY EDIRAY SUPER 8 movie editor, extremely brilliant light, with dry butt splicer	34.95
4100	MURAY EDIRAY SUPER 8 lamp	1.50

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RADIANT-PATHE

August 30, 1966

T. Nelson, Systems Consultant
Box 1546
Poughkeepsie, New York 12603

Dear Mr. Nelson:

Your recent inquiry regarding PATHE Professional motion picture equipment is gratefully appreciated. We look forward to you joining our distinguished family of Pathe camera owners.

Enclosed are literature and price lists describing the quality Pathe equipment. Of course, there is no substitute for your personal examination of our products and therefore, we invite you to visit the following authorized dealer:

General Photo
188 Broadway
Newburg, New York

Should there be any other information that you may desire, please be sure to let us know. We, at Radiant-Pathe, are grateful for this opportunity to serve you and assure you of our utmost efforts to deserve this consideration.

Very truly yours,

RADIANT-PATHE, INC.

John Kozin

John Kozin
Sales Department

RADIANT-PATHE, INC. 8220 NORTH AUSTIN AVENUE, MORTON GROVE, ILLINOIS 60053

PHONE (312) 967-9510